

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Currently Amended) A method for the diagnosis of irritable bowel syndrome, the method comprising:

obtaining a fecal sample from a person presenting with symptoms common to inflammatory bowel disease and irritable bowel syndrome~~to be diagnosed~~; and

determining whether said sample contains an elevated level of endogenous lactoferrin, wherein if said sample does not contain an elevated level of endogenous lactoferrin, a diagnosis of irritable bowel syndrome is ~~substantially~~ concluded.

2. (Original) The method as recited in claim 1, further comprising diluting said fecal sample.

3. (Original) The method as recited in claim 2, wherein said step of diluting said fecal sample comprises diluting said sample to a 1:400 dilution factor.

4. (Previously Amended) The method as recited in claim 1, wherein said endogenous lactoferrin comprises total lactoferrin selected from the group consisting of plasma, bile, leukocytes and mucosal secretions.

4 5. (Original) The method as recited in claim 1, wherein said endogenous lactoferrin is qualitatively determined.

5 ~~8~~. (Previously Amended) The method as recited in claim 1, wherein said step of determining whether said sample contains an elevated level of endogenous lactoferrin includes contacting said sample with immobilized polyclonal antibodies to human lactoferrin to create an antibody bound sample.

6 ~~7~~. (Previously Amended) The method as recited in claim ~~6~~<sup>5</sup>, wherein said step of determining whether said antibody bound sample contains an elevated level of endogenous lactoferrin further includes contacting said antibody bound sample with enzyme-linked polyclonal antibodies such that the enzyme-linked polyclonal antibodies are allowed to bind to capture lactoferrin to create an enzyme-linked antibody bound sample.

7 ~~8~~. (Previously Amended) The method as recited in claim ~~7~~<sup>6</sup>, wherein said step of determining whether said enzyme-linked antibody bound sample contains an elevated level of endogenous lactoferrin further includes determining an optical density of said readable sample at 450 nm, wherein said optical density corresponds to a level of endogenous lactoferrin in the enzyme-linked antibody bound sample.

8 ~~9~~. (Previously Amended) The method as recited in claim ~~8~~<sup>7</sup>, wherein if said optical density of said enzyme-linked antibody bound sample is greater than 0.200, said fecal sample contains an elevated level of endogenous lactoferrin.

10. (Canceled)

11. (Canceled)

9/12. (Currently Amended) A diagnostic assay for determining whether a fecal sample contains an elevated level of endogenous lactoferrin as compared to a reference value for healthy control subjects, said assay comprising:

obtaining a human fecal sample from a person presenting with symptoms common between inflammatory bowel disease and irritable bowel syndrome;

diluting said sample;

contacting said sample with immobilized polyclonal antibodies to endogenous lactoferrin to create an antibody bound sample;

contacting said treated sample with enzyme-linked polyclonal antibodies such that the enzyme-linked polyclonal antibodies are allowed to bind to capture lactoferrin to create an enzyme-linked antibody bound sample; and

determining the optical density of said readable sample at 450 nm to determine whether said enzyme-linked antibody bound sample contains an elevated level of endogenous lactoferrin as compared to a reference value for healthy control subjects, wherein if said enzyme-linked antibody bound sample does not contain an elevated level of endogenous lactoferrin, a diagnosis of irritable bowel syndrome is ~~substantially~~ concluded.

13. (Canceled)

10/14. (Previously Amended) The diagnostic assay as recited in claim 9/12, wherein if said optical density of said enzyme-linked antibody bound sample is greater than or equal to 0.200, said fecal sample contains an elevated level of endogenous lactoferrin as compared to a reference value for healthy control subjects.

~~11~~ ~~15~~. (Original) The diagnostic assay as recited in claim ~~12~~<sup>9</sup>, wherein said assay comprises an enzyme-linked immunoassay.

~~12~~ ~~16~~. (Original) The diagnostic assay as recited in claim ~~12~~<sup>9</sup>, wherein said endogenous lactoferrin comprises total lactoferrin from one or more of plasma, bile, leukocytes, and mucosal secretions.

17-20. (Canceled)

~~13~~ ~~21~~. (Original) The method of claim 1, wherein if said sample contains an elevated level of endogenous lactoferrin, a diagnosis of inflammatory bowel disease is substantially concluded.

~~14~~ ~~22~~. (Original) The diagnostic assay of claim ~~12~~<sup>9</sup>, wherein if said sample contains an elevated level of endogenous lactoferrin, a diagnosis of inflammatory bowel disease is substantially concluded.